

### **REMARKS**

The above amendments are made in response to the Office action of October 3, 2006. The Examiner's reconsideration is respectfully requested in view of the above amendment and the following remarks. No new matter has been added, amendments have been made for purposes of clarifying the claimed invention.

Claim 1 has been amended. Support for the amendments to claim 1 can be found in FIG. 5 and pages 12-14 of the specification as filed. Claims 1-7, 11-18 are pending in the present application, claims 12-16 have been withdrawn leaving claims 1-7, 11, 17 and 18 for further consideration.

### **Specification**

The Examiner states that the title of the invention is not descriptive. In response to the previous Office action the title was amended to read "IMAGE DISPLAY DEVICE". It is believed that this title adequately indicates the invention to which the claims are directed. The preamble to the independent claim states that the claims relate to a display device.

Applicants respectfully request that in light of the above remarks the objections to the specification be withdrawn.

### **Claim Rejections Under 35 U.S.C. § 112**

Claims 1-7, 11 and 17-18 stand rejected under 35 U.S.C. § 112, second paragraph as being incomplete for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically the Examiner states that claim 1 recites the term "pixel portions" as being ambiguous.

The Examiner has previously assumed that the term was synonymous with "pixel region", meaning an area defined by neighboring gate and data lines. However, pixel portion has been defined with respect to the exemplary embodiments disclosed in the application as filed. Pixel portions are defined with respect to their relationship with the light sensing portions (LSP) on pages 5 and 6 of the application as filed; pixel portions

are defined with respect to their relationship with the gate line GL and the data line DL on pages 12 and 14-15 of the application as filed; and pixel portions are illustrated in FIGS. 1, 3 and 5-7. The term pixel portion is not directly analogous to the term "pixel region", meaning the entire area defined by neighboring gate and data lines, rather it refers to the more limited area as illustrated in FIG. 6. It should be noted that it does not directly refer to the area covered by the pixel electrode, but rather is slightly larger, again as illustrated in FIG. 6.

More specifically, the pixel portion should be regarded as the minimum area necessary to include a gate line GL extended in a first direction D1, a data line DL extended in a second direction D2 substantially perpendicular to the first direction D1, a first thin film transistor (TFT) T1 connected to the gate and data lines GL and DL, a transparent electrode TE connected to the first TFT T1, and a reflective electrode RE connected to the first TFT T1, as defined on page 12 and FIGS. 5-7 of the application as filed.

In light of the above remarks it is respectfully requested that the Examiner reconsider the rejection of claims 1-7, 11, 17 and 18 under 35 U.S.C. §112.

### **Rejections Under 35 U.S.C. § 103**

In order for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all of the elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). See MPEP 2143. Claims 3, 4, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of Applicants' prior art (Fig. 3).

***Claims 1-3, 7, 11 and 18***

Claims 1-3, 7, 11 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hack et al. (U.S. Patent No. 5,204,661, hereinafter "Hack") in view of Shimada et al. (U.S. Patent No. 5,910,829, hereinafter "Shimada") and further in view of Street et al. (U.S. Patent No. 5,920,401, hereinafter "Street"). The Examiner has stated that Hack in view of Shimada and further in view of Street discloses all of the elements of the abovementioned claims.

***Claims 4 and 6***

Claims 4 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hack in view of Shimada in view of Street and further in view of Matsumoto et al. (U.S. Patent No. 4,097,128, hereinafter "Matsumoto"). The Examiner has stated that Hack in view of Shimada in view of Street and further in view of Matsumoto discloses all of the elements of the abovementioned claims.

***Claim 5***

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hack in view of Shimada in view of Street and further in view of Cook (U.S. Patent Application No. US 2002/0021291, hereinafter "Cook"). The Examiner has stated that Hack in view of Shimada in view of Street and further in view of Cook discloses all of the elements of claim 5.

***Claim 17***

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hack in view of Shimada in view of Street and further in view of Huang (U.S. Patent Application No. 6,099,185, hereinafter "Huang"). The Examiner has stated that Hack in view of Shimada in view of Street and further in view of Huang discloses all of the elements of claim 17.

The Applicants traverse the outstanding rejections of claims 1-7, 11, and 17 and submit that claims 1-7, 11, 17, and 18 are in condition for allowance. Claim 1 has been

amended. As amended, claim 1 recites, *inter alia*, “a substrate including: **a plurality of pixel portions; at least one light sensing portion disposed to face corresponding to the red color pixel, the at least one light sensing portion sensing light provided through the corresponding red color pixel, the at least one light sensing portion including multiple light sensing portions each of which is disposed at an area having a selected number of the pixel portions; a transparent electrode disposed above at least a portion of the pixel portion; and a reflective electrode disposed on at least a portion of the transparent electrode, wherein a number of the light sensing portions is smaller than a number of the pixel portions in a unit area and, wherein further, the light sensing portions each have a size smaller than a size of the respective pixel portions.”**

The Applicants submit that the features recited in claim 1 are neither taught by, nor rendered obvious in view of the cited art references. In combination, none of the relevant cited references, namely, Hack, Shimada, Street, Matsumoto, Cook or Huang, teach or make obvious each and every feature recited in Applicants' claim 1.

In particular, none of the cited references teach the use of **a transparent electrode disposed above at least a portion of the pixel portion and a reflective electrode disposed on at least a portion of the transparent electrode.**

Accordingly, none of the cited references teach or make obvious all of the features recited in claim 1.

For at least these reasons, the Applicants submit that claim 1, as amended, is not rendered obvious in view of the cited references, either alone or in combination. Reconsideration of the outstanding rejection is respectfully requested.

Claims 2-7, 11, 17, and 18 depend from what should be an allowable claim 1. For at least these reasons, the Applicants submit that claims 2-7, 11, 17, and 18 are in condition for allowance and respectfully request reconsideration and withdrawal of the outstanding rejections with respect to these claims.

**Conclusion**

In light of the above remarks, the present application including claims 1-7, 11, 17 and 18 are believed to be in condition for allowance.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the outstanding rejections. If there are any charges due with respect to this response, please charge them to Deposit Account No. 06-1130 maintained by Applicants' Attorneys.

Respectfully submitted,

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